



presents  
Accessibility Software Tools  
and 508 Compliance

April 24, 2013

## Center of Excellence (COE) Concept

*Each Center of Excellence represents a focused, Agency-wide leadership responsibility in a specific area of technology or knowledge. Centers of Excellence are chartered with a clear definition of their capabilities and boundaries. They are charged to be preeminent within the Agency, if not worldwide, with respect to the human resources, facilities, and other critical capabilities associated with the particular area of excellence*

**Office of the Chief Technologist; NASA**

# Elements of an Accessibility COE

- Technology
- Manual Testing
- Governance
- Education
- Incident Triage
- Sustainment

# Technology in our Ally COE

**Don Evans, Deque Senior Accessibility Architect**

- WorldSpace Sync
  - Enterprise Testing and Reporting
- FireEyes
  - Site Content Remediation

**Ian Kelly, Deque Senior Software Developer**

- Amaze
  - Incident Triage

# What is Amaze?

- A solution for fixing accessibility issues
  - Without amending the *source code* of the application
  - Secure framework for delivering and running Javascript code which fixes issues on the page
  - The delivered code is called an overlay

## **The Technology We Use To Create a Center of Excellence**

- WorldSpace Sync
  - Enterprise Site Testing and Reporting
- FireEyes
  - Page Content Testing and Remediation for Developers
- Amaze (Ian Kelly)
  - Secure Overlay Technology that can be used to make non-accessible web sites accessible.

## **How Are We Using this in the Dot Gov Space?**

Step 1: WorldSpace Sync scans the web site.

Step 2: Developers are given access to the issues via FireEyes.

Step 3: Developers download issues and fix them using FireEyes.

Step 4: WorldSpace rescans to confirm the issues are fixed.

Step 5: When WorldSpace reports 100% complete, the site is turned over to the manual testers in the agency for final testing and approval.

# What have been some key benefits?

- **Reduced cycle time** – applications are being fixed faster with less back and forth between testers and developers
- **Increased flexibility** – multiple methods of validation at the “source”
- **Improved quality** – accessibility defects are being identified with a shared understanding inside and outside the agency with shared tools
- **Reduced cost** – manual testing, which is more labor intensive (costly) only needed if automated testing passes (low lying fruit)
- **Established Metrics for Governance** – regular assessment timeline and metrics reporting possible at a large scale allowing easy internal and external communication on progress, risks and challenges
- **Continuous monitoring** – to ensure that no inaccessible content goes to production















## **WorldSpace Sync**

WorldSpace Sync provides an enterprise-level suite of tools that supports digital accessibility for every member of the development team, in every phase of the software development lifecycle





















# Specific Accessibility Standards

## Project Analysis Settings Accessibility

### Web Content Accessibility Guidelines 1.0 or 2.0

-   WCAG 2.0 Level A
-   WCAG 2.0 Level AA
-   WCAG 1.0 Priority 1
-   WCAG 1.0 Priorities 1 and 2
-   WCAG 1.0 Priorities 1, 2 and 3

### Section 508

-   Paragraph A - Equivalent alternatives for non-text elements
-   Paragraph B - Synchronized and equivalent alternatives for multimedia
-  Paragraph C - Information conveyed with color alone
-  Paragraph D - Document readable without Style sheets
-  Paragraph E - Redundant text links for server side image map
-  Paragraph F - Convert server side image maps to client side image maps
-  Paragraph G - Row and column headers for data tables
-  Paragraph H - Associate data and header cells for multi-dimensional data tables
-  Paragraph I - Title frames/iframes to facilitate frame identification and navigation
-  Paragraph J - Screen Flicker in range of 2 - 55 Hz
-  Paragraph L - Functional test for Scripting
-   Paragraph M - Plug-in/Applet Required
-   Paragraph N - Electronic Forms
-   Paragraph O - Repetitive navigation links
-  Paragraph P - Timed Response

# Organization Dashboard

WorldSpace Sync



Donald Evans



Gefälscht CompuTech



Go!



Choose Project



Go!



Date Range

1-15-2013












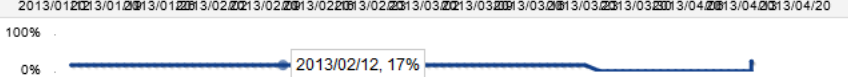
- 4-15-2013



Go!

[+ show potential issues](#)

ACCESSIBILITY

Name ▲	Total Pages ▴	Score ▴	Trend	Common Issues ▴
Gefälscht CompuTech	173	3% 	100% 	0
Gefälscht CompuTech				
Basic Scan	19	57% 	100% 	0
Demo Project Basic Scan	23	4% 	100% 	0
Gefälscht Monitor	20	56% 	100% 	0
Gefälscht CompuTech	42	28% 	100% 	0

Items per page: 25



Go!

# Project Report – Issues

## Automated issues

Grouping	Standard	Priority	Description	Issues	Pages	% of Pages
<b>Alternative text</b>				<b>164</b>	<b>28</b>	
Alternative text	Paragraph A - Equivalent alternatives for non-text elements	Serious	Image is missing a text equivalent.	12	4	<div></div>
Alternative text	Paragraph A - Equivalent alternatives for non-text elements	Serious	Invalid (empty) link text.	13	4	<div></div>
Alternative text	Paragraph A - Equivalent alternatives for non-text elements	Serious	Alt attribute is empty (alt=""); an image of this size needs a non-empty alt.	1	1	<div></div>
Alternative text	Success Criterion 1.1.1 Non-text Content	Critical	Missing text equivalent for button.	3	2	<div></div>
Alternative text	Success Criterion 1.1.1 Non-text Content	Serious	Active images (images inside anchor tags) must have a non-empty alt attribute	28	10	<div></div>
Alternative text	Success Criterion 1.1.1 Non-text Content	Serious	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	32	13	<div></div>
Alternative text	Success Criterion 1.1.1 Non-text Content	Serious	Images must have an alt attribute	50	13	<div></div>
Alternative text	Success Criterion 4.1.2 Name, Role, Value	Critical	Buttons or elements that act as buttons MUST have a visible name or text alternative for image	2	1	<div></div>
Alternative text	Success Criterion 4.1.2 Name, Role, Value	Critical	HTML links or elements that act as links MUST have a visible name or text alternative for image as well as an HREF	23	9	<div></div>
<b>Color</b>				<b>9</b>	<b>2</b>	
Color	Success Criterion 1.4.3 Contrast (Minimum)	Critical	Poor visibility between text and background colors.	7	1	<div></div>
Color	Success Criterion 1.4.1 Use of Color	Minor	When CSS is disabled, there is poor visibility between text and background colors.	2	1	<div></div>
<b>Forms</b>				<b>21</b>	<b>18</b>	
Forms	Success Criterion 1.3.1 Info and Relationships	Critical	Text entry field does not have an explicit label or a title attribute.	20	18	<div></div>
Forms	Success Criterion 1.3.1 Info and Relationships	Critical	Textarea does not have an explicit label or a title attribute.	1	1	<div></div>

# Drilling Down into Issues

Currently Selected: 19 Total Number: 19 / Listing: 1







Report Format: Default Items per page: 20 Page: 1

<input checked="" type="checkbox"/>	Action	Source with issue	Assigned To	Label	Status	Description	Severity	Tag Type
<input checked="" type="checkbox"/>	Assign to Label(s)	<code>&lt;img src="images/site/small1174-3.jpg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>	Delete	<code>&lt;img src="images/site/small1174-2.jpg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>	Set status	<code>&lt;img src="images/site/small1174-1.jpg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>	Set severity	<code>&lt;img width="125" height="125" src="images/site/desktop125x125.jpg" class="img ..."/&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>	Export to CSV	<code>&lt;img src="images/site/small60-1.jpg" class="img1" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>	Export to Excel	<code>&lt;img class="listingImg" src="images/site/desktop250-1.jpg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>		<code>&lt;img src="images/site/small60-2.jpg" class="img1" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>		<code>&lt;img src="images/site/small60-3.jpg" class="img1" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>		<code>&lt;img class="listingImg" src="images/site/desktop250-2.jpg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG
<input checked="" type="checkbox"/>		<code>&lt;img class="listingImg" /&gt;</code>	melanie.philipp@deque.com	,05-08-2012	Open	Image is missing a text equivalent.	Violation	IMG

# Using the Image Gallery

Currently Selected: 0 Total Number: 32 / Listing: 1-2

Report Format: Image Gallery Items per page: 20 Page: 1

Image	Alt Attribute	Suggested Remediation	Status	Source code for element with issue	Description	Severity
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img alt="" src="images/site/homeLanding.jpg" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img src="images/site/small160-1.jpg" class="img1" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img src="images/site/small160-2.jpg" class="img1" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img src="images/site/small160-3.jpg" class="img1" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img src="images/site/small1174-3.jpg" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation
<input type="checkbox"/> 		<input type="text"/> <a href="#">Fix this</a> <a href="#">Fix all</a>	Open	<code>&lt;img src="images/site/small1174-2.jpg" /&gt;</code>	Ensure that informational images (larger than your specified threshold) have a meaningful alt value.	Violation

# Continue to Drill down

**Practice:** Accessibility

**Page:**

[View Page Details](#)

**Element XPath:**

**Date** Fri Mar 9 12:39:55 EST 2012

**Severity Code**

<b>Standard:</b>	Standard :	WCAG 2	Level :	Level A	Category :	Success Criteria 1.1.1
	Standard :	Section 508	Level :	Para-A	Category :	N/A

**Description of Issue** Image is missing a text equivalent.

**Tag Type** <IMG>

**Status:**

**Assigned to:**

**Label(s) (separate multiple labels with a comma ","):**

**Comments:**

null

**Suggested remediation:**

alt="laptop"

**Source code for element with issue:**

```

```

# Source Code & Remediation

## Source code for element with issue:

```

```

<http://webtestingcourse.dequecloud.com/images/site/desktop125x125.jpg>

## WCAG 2.0 Guideline 1.1 - Text Alternatives

All images (non-text content) must have a meaningful text alternative that serves the equivalent purpose of the image.

Text is considered accessible to almost all users since it is handled by screen readers, non-visual browsers, and braille readers.

The content of the `alt` text will vary based on the purpose of the image:

- **Active images:** For active images (images in inside anchor `a` tags), the alternative text should convey the purpose or function of the link. Do not include "link to" in the alt text since screen readers will announce that the image is a "link graphic" before announcing the alt text.
- **Non-active images:** If the image is not active, but conveys information, then the alternative text must convey the same information.
- **Decorative images:** If an image conveys no information, or is redundant, specify that with null alt text: `alt=""` (no space between the quotes)
- **Images of text:** If an image is an image of text, the `alt` text should be the same as the text in the image.

If a short description can not serve the same purpose and present the same information as the non-text content (e.g., a chart or complicated diagram), provide a long description using the `longdesc` attribute. See Example 3 below.

## Applicable to:

- [Success Criteria 1.1.1 - Non-Text Content](#)

## Remediation

### Example 1 - Alt text on an active image.

Alt text should describe the function of the link, not the image itself.

*Incorrect*

```
<a href="somepage.html"></a>
```



*Correct*

```
<a href="#"></a>
```



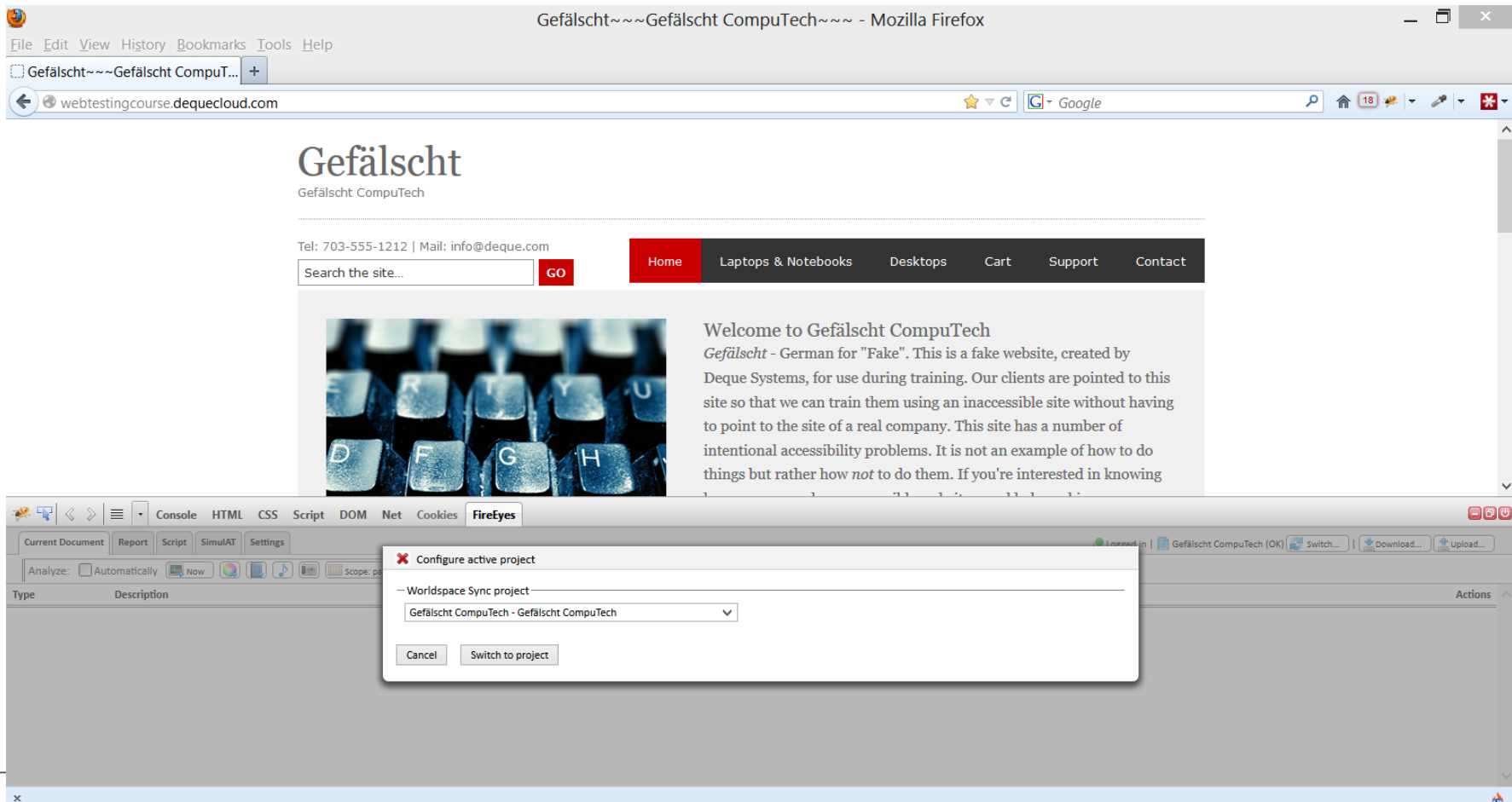


## Deque FireEyes

**FireEyes is offered free of charge from the makers of WorldSpace Sync, the most powerful accessibility software suite available.**

FireEyes is for individual, non-commercial use, and provides developers and QA testers the ability to check pages for accessibility issues, and provides help and support to solve the issues.

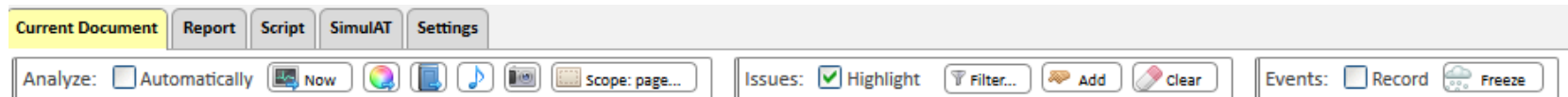
# Switch to Project



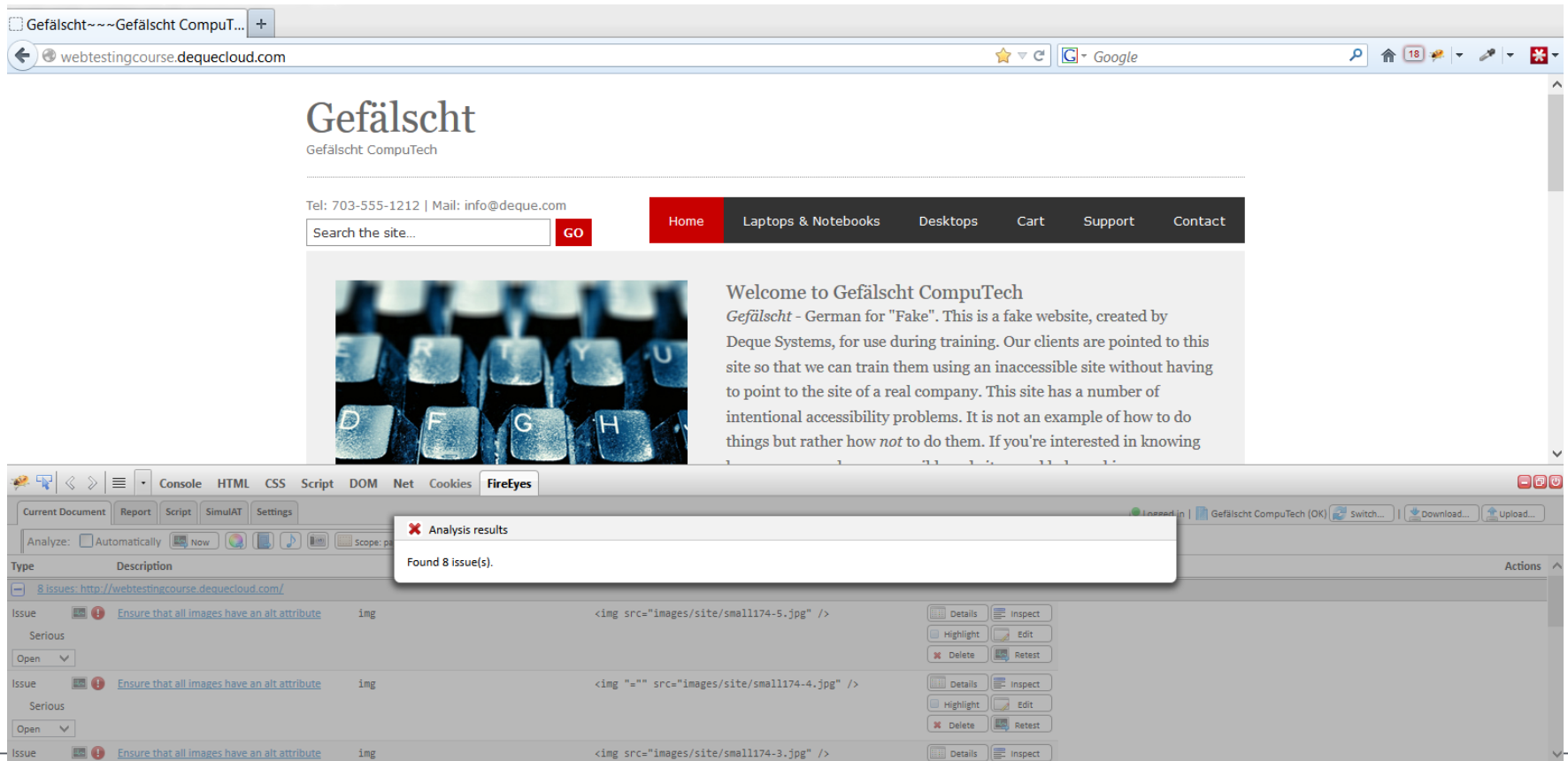
The screenshot shows a Mozilla Firefox browser window displaying a website titled "Gefälscht" (German for "Fake"). The website is a placeholder for training purposes, created by Deque Systems. It features a navigation menu with links like Home, Laptops & Notebooks, Desktops, Cart, Support, and Contact. Below the menu is a search bar and a welcome message explaining the site's purpose.

Overlaid on the bottom of the browser window is the Deque Cloud IDE interface. A dialog box titled "Configure active project" is open, showing a dropdown menu with the selected project "Gefälscht CompuTech - Gefälscht CompuTech". The dialog has "Cancel" and "Switch to project" buttons.

# Current Document Tab



# Press the Now Button



The screenshot shows a web browser window displaying a website called "Gefälscht" (German for "Fake"). The website is a fake site created by Deque Systems for training purposes. It features a navigation bar with links: Home, Laptops & Notebooks, Desktops, Cart, Support, and Contact. A search bar is also present. The main content area includes a welcome message and a paragraph explaining the site's purpose.

Overlaid on the bottom of the browser window is the Deque FireEyes accessibility testing tool interface. The interface shows a list of issues found during the analysis. A pop-up window displays the analysis results, stating "Found 8 issue(s)". The issues listed are:

- Issue: Ensure that all images have an alt attribute (img tag)
- Issue: Ensure that all images have an alt attribute (img tag)
- Issue: Ensure that all images have an alt attribute (img tag)

The interface also includes a table with columns for Type, Description, and Actions. The Actions column contains links for Details, Highlight, Edit, Delete, and Retest.

# List the issues

Gefälscht ~ ~ ~ Gefälscht CompuT... +

webtestingcourse.dequecloud.com

## Gefälscht

Gefälscht CompuTech

Tel: 703-555-1212 | Mail: info@deque.com

Home Laptops & Notebooks Desktops

FireEyes

Current Document Report Script SimulAT Settings

Analyze: ☐ Automatically   Issues: ☐ Highlight    Events: ☐ Record


Type	Description	Tag	Frame	Source
8 issues: http://webtestingcourse.dequecloud.com/				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				
Issue	Ensure that all images have an alt attribute	img		<input type="button" value="Details"/> <input type="button" value="Inspect"/> <input type="button" value="Highlight"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Retest"/>
Serious				
Open				

# Highlight All

Gefälscht~---Gefälscht CompuT... +


webtestingcourse.dequecloud.com

Google




every computer we sell and even some that we don't. If we don't have a part, it doesn't exist. If it does exist and we don't have it, we'll get it. If we can't get it, we'll steal it. That's how we roll.

Continue Reading »



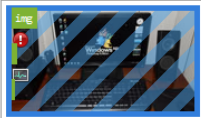




great? want a bigger version? Go to [this page](#) and take a closer look. Our opulently appointed corporate offices are located in the finest strip mall within miles. We think you'll agree that our place is the place among places when you think of a place that does our sort of thing.

Continue Reading »



we'll come to your place. we can fix your stuff in your home for a sizeable surcharge. We'll get there at a time that is incredibly inconvenient to you and come unprepared for the task at hand. You'll tell all your friends what great service you received!

Continue Reading »

Laptops & Notebooks

Desktops

Test Course Materials

Cart

Support

Fregatte 17

Abgenutzt 15

Beschissen 750

Rindviecher 1000

Verrottet 875

Dragon Cheat Sheet

JAWS Cheat Sheet

Sample Test Case Template

Sample Issue Template

Looke here! Just in case you didn't notice the 'Cart' link in the global navigation, you can also find a link to your cart down here, too.

Get answers to all of your favorite support questions here, including such gems as "Where is my 'Any' key?" and "How many pins does a

Issues for **img** element

Violation: WCAG 2 Level A Success Criteria 1.1.1 — Ensure that all images have an alt attribute

Console

HTML

CSS

Script

DOM

Net

Cookies

FireEyes

Current Document

Report

Script

SimulAT

Settings

Analyze:

Automatically

Now

Scope: page...

Issues:

Highlight

Filter...

Add

Clear

Events:

Record

Freeze

Type

Description

Tag

Frame

Source

Actions

8 issues: <http://webtestingcourse.dequecloud.com/>

Issue

Ensure that all images have an alt attribute

img



Details

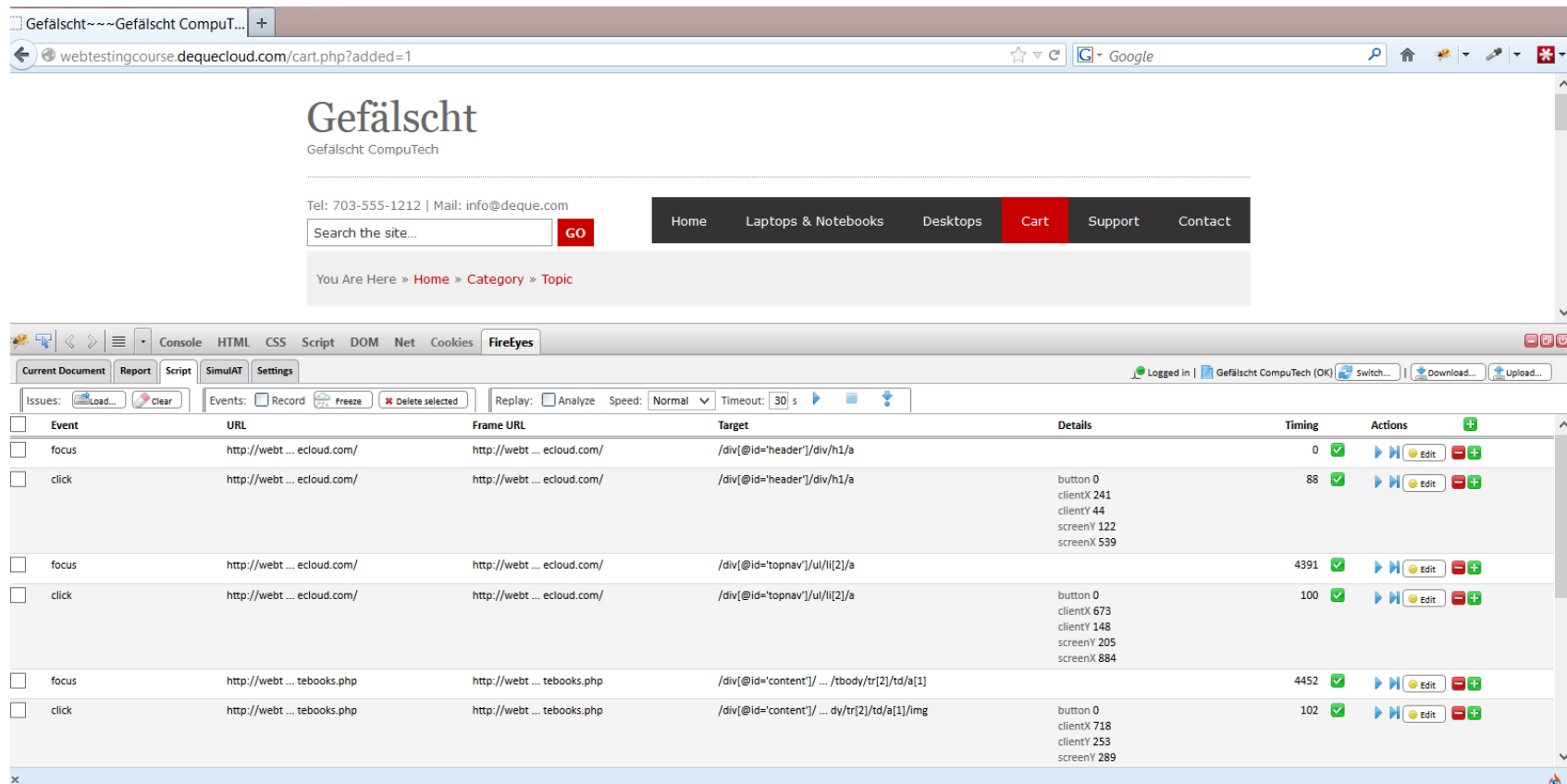
Inspect

Highlight

Edit

Serious

# Record Scripts



The screenshot displays a web browser window with the address bar showing `webtestingcourse.dequecloud.com/cart.php?added=1`. The page content includes the "Gefälscht" logo, contact information (Tel: 703-555-1212 | Mail: info@deque.com), a search bar, and a navigation menu with links: Home, Laptops & Notebooks, Desktops, Cart (highlighted in red), Support, and Contact. Below the navigation menu is a breadcrumb trail: "You Are Here » Home » Category » Topic".

Below the browser window, the FireEye web testing tool interface is visible. It shows a table of recorded events with columns for Event, URL, Frame URL, Target, Details, Timing, and Actions. The table contains several rows of data, including focus and click events on various elements of the website.


Event	URL	Frame URL	Target	Details	Timing	Actions
focus	http://webt ... ecloud.com/	http://webt ... ecloud.com/	/div[@id="header"]/div/h1/a		0	▶ Edit
click	http://webt ... ecloud.com/	http://webt ... ecloud.com/	/div[@id="header"]/div/h1/a	button 0 clientX 241 clientY 44 screenY 122 screenX 539	88	▶ Edit
focus	http://webt ... ecloud.com/	http://webt ... ecloud.com/	/div[@id="topnav"]/ul/li[2]/a		4391	▶ Edit
click	http://webt ... ecloud.com/	http://webt ... ecloud.com/	/div[@id="topnav"]/ul/li[2]/a	button 0 clientX 673 clientY 148 screenY 205 screenX 884	100	▶ Edit
focus	http://webt ... tebooks.php	http://webt ... tebooks.php	/div[@id="content"] / ... /tbody/tr[2]/td/a[1]		4452	▶ Edit
click	http://webt ... tebooks.php	http://webt ... tebooks.php	/div[@id="content"] / ... /tbody/tr[2]/td/a[1]/img	button 0 clientX 718 clientY 253 screenY 289	102	▶ Edit

# SimulAT

Gefälscht~~~Gefälscht CompuT... +

webtestingcourse.dequecloud.com

Google



Laptops & Notebooks Desktops Test Course Materials Cart Support

Console HTML CSS Script DOM Net Cookies FireEyes

Current Document Report Script SimulAT Settings

Logged in | Gefälscht CompuTech (OK) Switch... Download... Upload...

Display: Entire document Run With selected: Inspect Add issue

Page has ten headings and thirty-one links Gefälscht tilde tilde tilde Gefälscht CompuTech tilde tilde tilde

Heading level one Link Gefälscht

Gefälscht CompuTech

Tel colon seven hundred three dash five hundred fifty-five dash one thousand two hundred twelve vertical bar Mail colon info at deque.com Site Search Edit Search the site... GO button

List of six items. bullet Link Home bullet Link Laptops and Notebooks bullet Link Desktops bullet Link Cart bullet Link Support bullet Link Contact List end

Heading level three Welcome to Gefälscht CompuTech

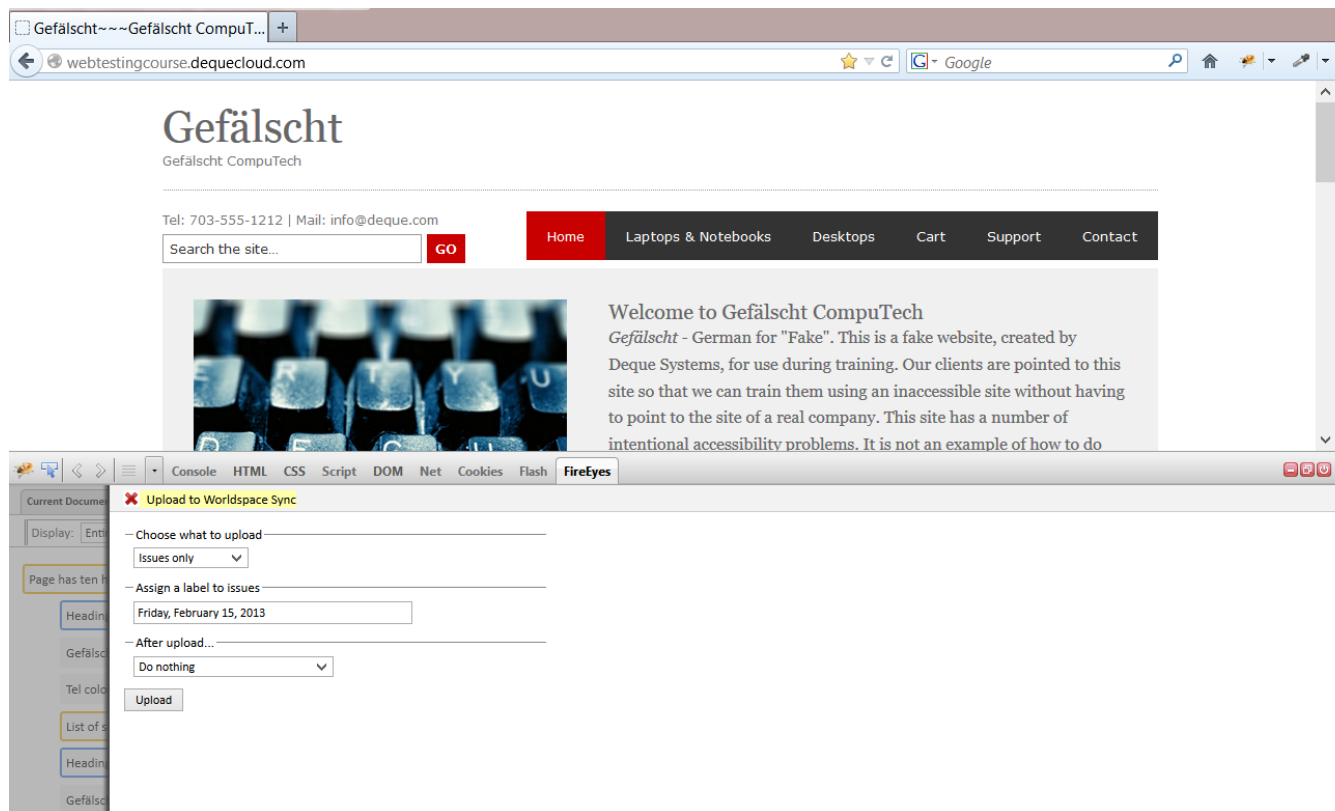
Gefälscht

dash German for quote Fake quote . This is a fake website, created by Deque Systems, for use during training. Our clients are pointed to this site so that we can train them using an inaccessible site without having to point to the site of a real company. This site has a number of intentional accessibility problems. It is not an example of how to do things but rather how

not to do them. If you're interested in knowing how you can make an accessible website, need help making your website accessible, or want to have your website tested for accessibility, please Link contact Deque Systems .



# WorldSpace Sync and FireEyes work together



# Conclusion

As an Accessibility Specialist at Deque, we have a lot of tools.

- We can easily find accessibility issues on any page with FireEyes.
- We can manage large numbers of pages across a single site or compete domains with WorldSpace Sync.
- We can easily inform developers and contractors exactly where the issue is located and how to fix it.
- We can track progress over time.
- We can easily drill down from a 50,000 foot level to the individual issue that needs to be fixed.
- We can use Amaze to fix sites that cannot be fixed by developers or may be time sensitive.

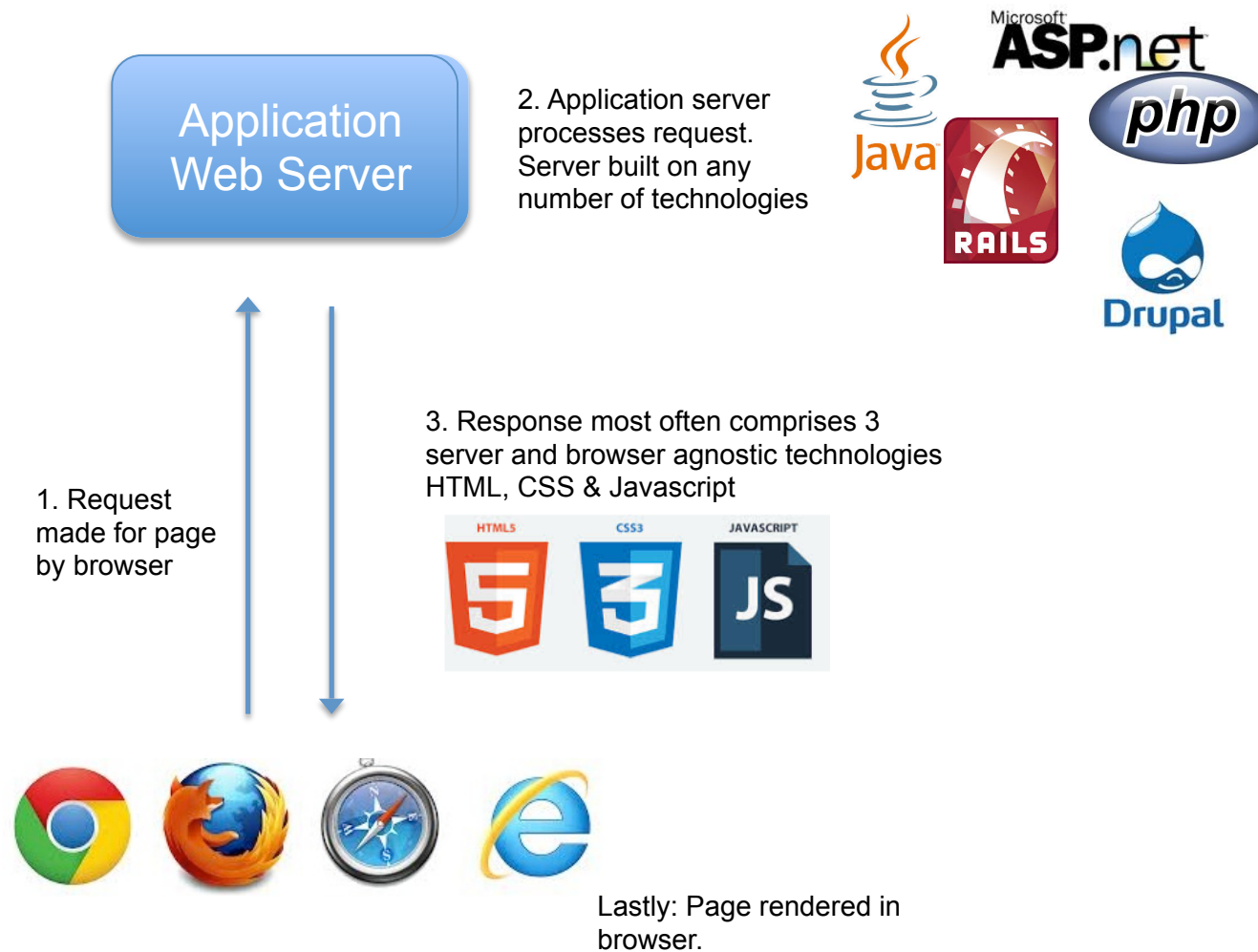
# amaze

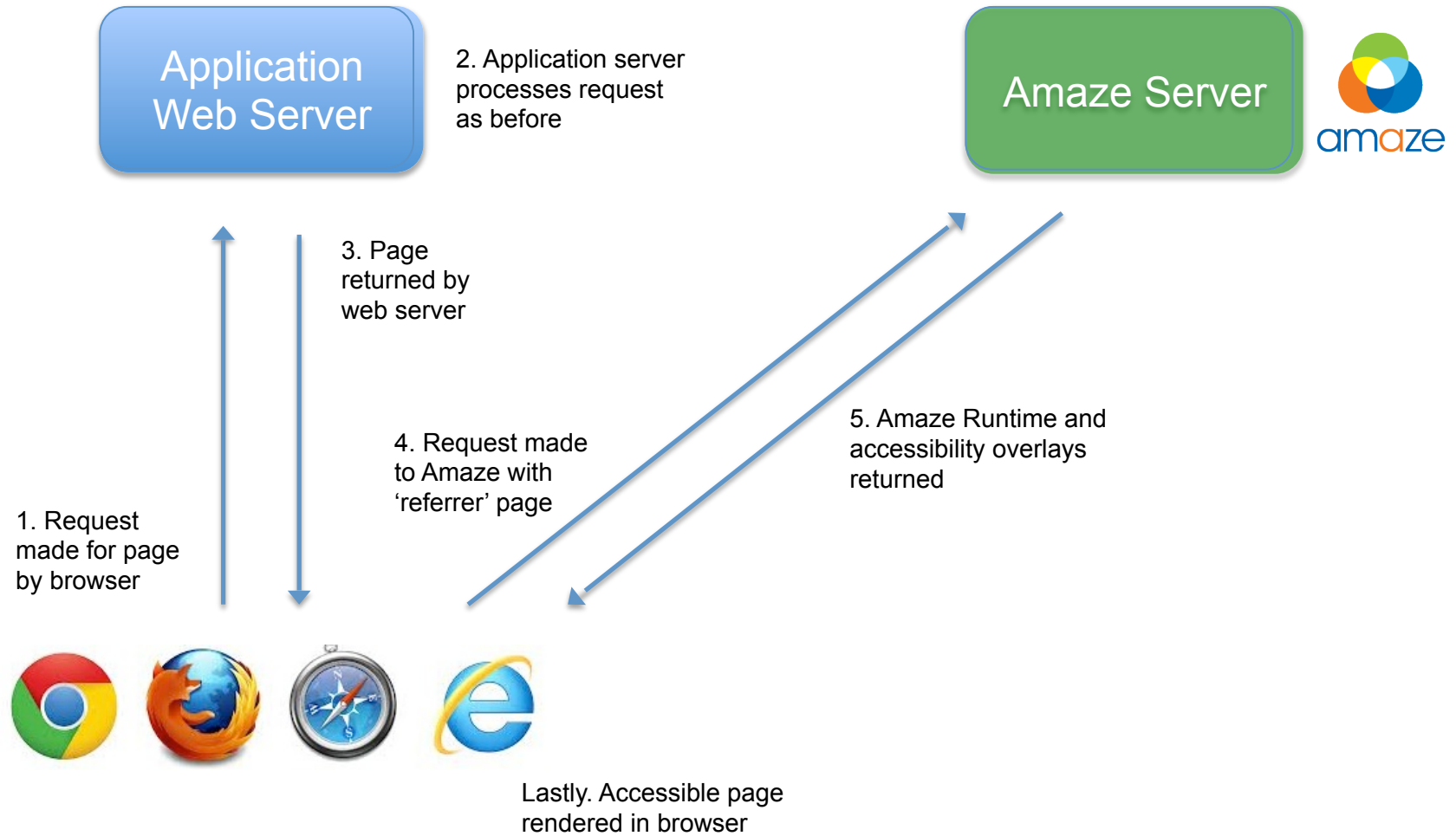
A groundbreaking new approach to accessibility

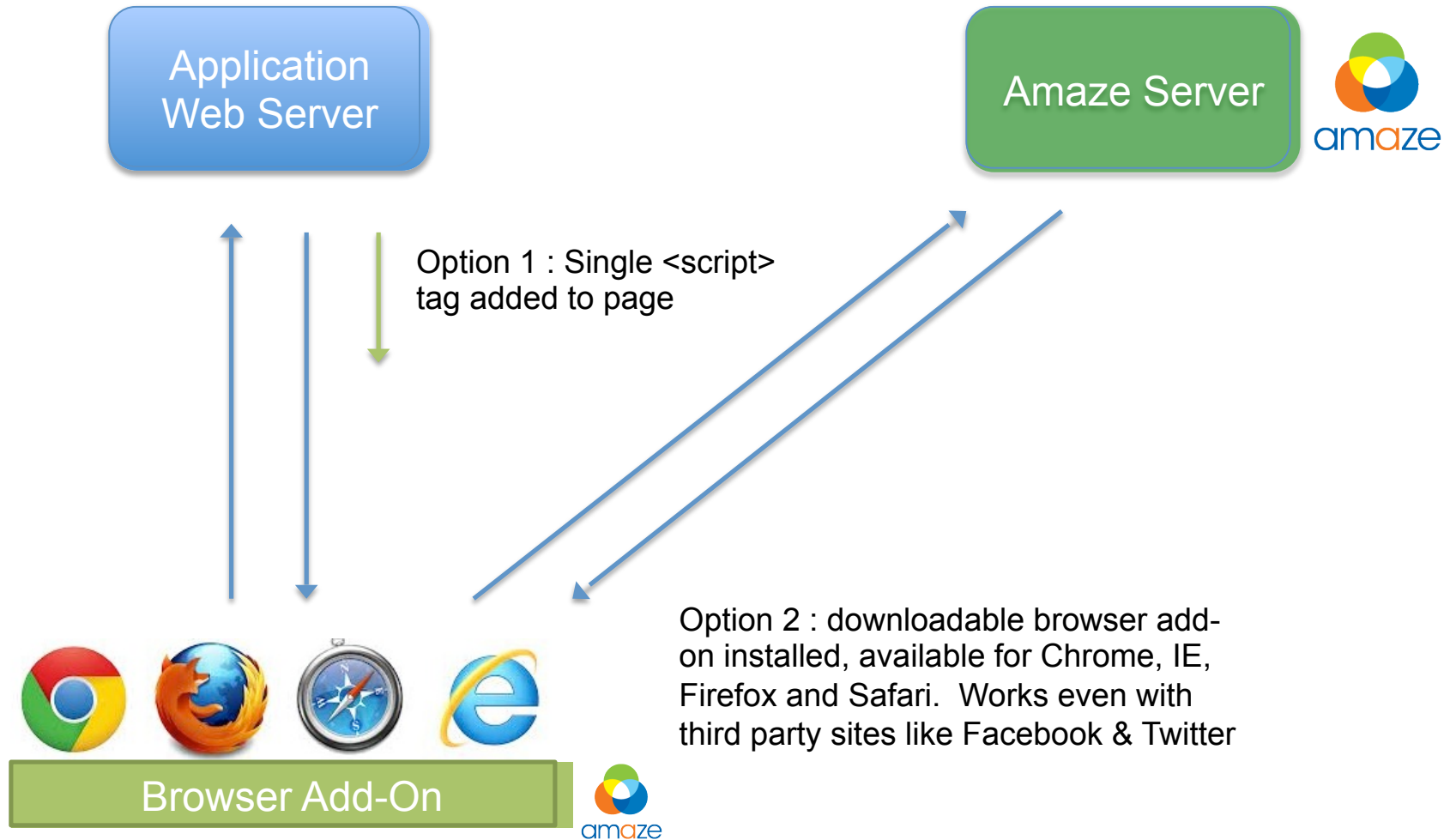
Make your mobile, web, and third party content  
accessible quickly and securely - **be amazed.**



[learn more](#)







# Demonstration

- Complaint handling scenario
- IT vendor, website not accessible
- Add an overlay to fix a problem with navigation and a contact-us form

## What can it do?

- Can resolve issues arising from bad html markup, CSS styling or Javascript code
- It can not make changes to other content, video, PDF etc
- It is independent of the server technology used, Amaze just corrects the delivered HTML & CSS
- It can work with no access to the web server (downloadable add-in required), or if you do have access to the server, a single `<script>` tag added to the page



# What does it comprise?

- The Amaze server
  - Chooses what Amaze overlays are required for each page
  - Minimizes 'payload' required to fix a page
  - Security features
  - High performance
  - Cloud solution
- Developer tools
  - In-browser tools to write overlays
  - Large library of standard accessibility fixes
- End-user browser add-ins
  - IE, Chrome, Firefox and Safari
  - Only required if you cannot add a `<script>` tag to the page

## Where would it be used?

- Remediate full websites
  - 3<sup>rd</sup> party vendor provides software
  - Developers to not have accessibility skills
  - Time constraints on development
- Complaint handling
  - Provide downloadable add-in
  - Spot fix individual issues quickly

# Security

- Amaze does not transmit or hold customer data
  - No database in Amaze, just a read-only copy of overlays
  - Just the 'referrer' information (the page), and the user-agent (browser type) passed to amaze for the server to choose overlays
  - No interaction with web server at all

# Security

- Amaze does deliver executable code to browser
  - Overlays have to be digitally signed by 2 or more approved people to be loaded on to the server
  - Prevents accidental or malicious introduction of overlays into the system
  - Monitoring system to compare Amaze code with 'gold standard'
  - Used in S&P 500 credit card serving environment

## Performance

- S&P 500 Credit Card Company
  - All customers use Amaze enabled pages
  - Over 8 million requests a day
- Deployment options
  - Secure cloud hosted environment
  - Host your own Amaze server

# Q & A

If you have any additional questions, please contact  
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